JPPT | Invited Commentary

Removing Barriers to Contraceptive Access for Adolescents

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ABBREVIATIONS BMD, bone mineral density; CHCs, combined hormonal contraceptives; DMPA, depot medroxyprogesterone acetate; EC, emergency contraception; FDA, US Food and Drug Administration; IUD, intrauterine device; LARC, long-acting reversible contraception; LNG, levonorgestrel; POP, progestin-only pill; UPA, ulipristal acetate; VTE, venous thromboembolism

KEYWORDS access; adolescent; barriers; contraception; emergency contraception; over the counter; pharmacy

J Pediatr Pharmacol Ther 2024;29(3):331–335

DOI: 10.5863/1551-6776-29.3.331

Contraception for Adolescents

Adolescence is the phase of life between childhood and adulthood, from ages 10 to 19 years. It is a unique stage of development and an important time for setting the foundations of good health.[1] For post-menarchal adolescents, birth control is essential health care for both contraceptive and noncontraceptive purposes. According to United States nationally representative data, 40.5% of female teenagers, aged 15 to 19 years, are sexually active and of those, 52% had at some point used a birth control pill, 18% an injectable contraceptive agent, and 19% a long-acting reversible contraceptive (LARC).[2] Globally, there were 42 births per 1000 to girls aged 15 to 19 years in 2021.[3] There are significant health risks associated with unintended pregnancy in adolescence, including prematurity, preeclampsia, and higher prevalence of cesarean deliveries[4] along with poor well-being outcomes such as poverty, low educational attainment, and poorer quality of life.[5] These later consequences can be substantial for the adolescent, the family, the community, and society at large. Encouragingly, there has been a steady decline in adolescent pregnancy and abortion rates in the United States since the 1990s that can largely be attributed to expanded contraceptive use.[6] For adolescents, hormonal contraceptives have potential benefits beyond preventing pregnancy such as treating dysmenorrhea, heavy or irregular menstrual bleeding, ovarian cysts, or acne. Up to 94% of adolescent females experience painful periods,[7] and up to 25% experience marked menstrual disturbances.[8] Not surprisingly, adolescent females are more likely to use hormonal contraception to treat these conditions than older women, and it is estimated that a third of adolescents are prescribed birth control pills for noncontraceptive reasons.[9]

Contraception Safety

Contraception is significantly safer than the condition it is intended to prevent. There are side effects and rare adverse events associated with hormonal contraceptives, though they confer a lower risk than an unplanned pregnancy. Venous thromboembolism (VTE) is the most concerning contraceptive-related adverse event and is primarily related to the estrogen component in combined hormonal methods (i.e., pills, patch, and vaginal ring). Contraceptives are often dichotomized into combined (containing both estrogen and progestin) and progestin-only, particularly when considering safety. The most common side effect for all methods and particularly progestin-only methods is irregular menstrual bleeding or breakthrough bleeding, which is bleeding outside of the expected menstrual period. Typically, bleeding is not heavy or medically dangerous, but can be prolonged and bothersome to patients and is the most common reason for discontinuation. For most contraceptive methods, irregular bleeding tends to improve with time. Each method has a slightly different bleeding pattern. Though all methods tend to decrease the total amount of bleeding, users may experience more total days of bleeding. If bleeding is bothersome, nonsteroidal anti-inflammatory drugs or a short course of combined hormonal pills can be used to improve the bleeding profile.

Combined Hormonal Contraceptives. Combined hormonal contraceptives (CHCs), particularly combined oral contraceptives, are the most popular form of contraception in adolescents. CHCs are generally safe for otherwise healthy adolescents. Per the US Medical Eligibility Criteria for Contraceptive Use, contraindications include severe and uncontrolled hypertension, hepatic dysfunction, complicated heart disease (e.g., valvular disease, cyanotic heart disease, pulmonary

hypertension, previous coronary arteritis), migraines with aura, history of thromboembolism or thrombophilia (including antiphospholipid antibody), serious complications of diabetes (e.g., retinopathy, nephropathy, and neuropathy), and complicated solid organ transplant.[10] The most serious adverse event associated with CHC use is the increased risk of VTE. The incidence of VTE in current CHC users is about 0.06 per 100 pill-years.[11] In comparison, the risk is 0.2 per 100 years during pregnancy and the postpartum period.[12] Smoking is not a contraindication to CHC use in people younger than 35 years but should be discouraged.[10] CHCs have not been shown to increase risk of breast cancer,[13] but personal and family history of breast cancer should be considered, especially if it was hormone dependent. Regarding other cancers, the use of CHCs for more than 3 years provides significant protection against endometrial and ovarian cancers.[13] In addition to menstrual cycle changes, the most common side effects are breast tenderness and nausea.

Progestin-Only Contraceptives. All progestin-only methods are considered safe for women with estrogen contraindications. The progestin-implant is the most popular LARC among adolescents. Irregular vaginal bleeding is the most common side effect.[14] Aside from irregular bleeding, adverse effects are not common, but include emotional lability, weight gain, headache, and acne.

Hormonal intrauterine devices (IUDs) are another effective progestin-only LARC option that are growing in popularity among adolescents and young adults. There is a small increase in infection risk around the time of IUD insertion; however, beyond the first month after insertion, IUDs do not increase rates of pelvic inflammatory disease.[15] IUDs are safe for nulliparous women and are generally well tolerated in young women and have high continuation and satisfaction rates.[16]

The injectable contraceptive depot medroxyprogesterone acetate (DMPA) is particularly popular among adolescents. DMPA has the unique added benefit of decreasing seizure frequency in people with catamenial epilepsy[17] and may decrease sickle cell crises.[18] The most frequent side effect is irregular bleeding, which commonly improves with subsequent injections. Approximately 1 in 4 adolescents using DMPA experience weight gain[19] and users with obesity prior to DMPA are more likely to gain weight. One study found the average weight gain of adolescent users with obesity was 9.45 kg after 18 months, compared with 3 kg in adolescents with obesity and not taking any hormonal contraceptive.[20] DMPA also causes reduction in bone mineral density (BMD) and carries a boxed warning for this; however, evidence demonstrates recovery of BMD following cessation of DMPA. A prospective, matched cohort study showed that total hip BMD returned to almost baseline 2 years after discontinuation.[21] Initially a 2-year maximum use was recommended owing to BMD concerns. Professional societies no longer recommend that clinicians limit DMPA use to 2 years or the surveillance of BMD via dual-energy X-ray absorptiometry, because doing so could disproportionately affect adolescents who value the privacy and convenience of DMPA.[22] Per the United States Medical Eligibility Criteria for Contraceptive Use, adolescence (from menarche to 18 years) is a category 2 condition for which the advantages of DMPA use generally outweigh the risks in this age group.[10]

Progestin-only pills (POPs) are a suitable alternative for patients who prefer a pill and want to avoid estrogen-containing products. Historically, POPs were thought to be less effective than other methods owing to the importance of timing of pill administration; however, new drospirenone-containing formulations with a longer half-life demonstrate similar efficacy to CHCs.[23]

Emergency Contraception. Emergency contraception (EC) in the United States consists of levonorgestrel (LNG), ulipristal acetate (UPA; Ella, HRA Pharma, Paris, France, or the copper IUD. Levonorgestrel 1.5 mg (e.g., Plan B One-Step [Foundation Consumer Healthcare, Pittsburgh, Pennsylvania) is available to all ages over the counter without a prescription for use for up to 3 days after unprotected intercourse.[24] When used within 72 hours following intercourse, it prevents at least half of pregnancies that would have occurred without its use.[25] UPA can be used up to 5 days following unprotected intercourse. It is only available with a prescription and is more effective after the 72-hour window than LNG 1.5 mg.[26] Because of the short duration of exposure, there are no medical contraindications to LNG or UPA. Common self-limited side effects include nausea, uterine cramping, and irregular bleeding.

Barriers to Reproductive Health Care Access

Despite the benefits of contraception to adolescents, there are barriers to access in this age group, including lack of transportation, difficulty navigating large health care systems, appointment availability, confidentiality concerns, and cost. Data from a recent national survey of people with childbearing capacity showed that 88% of respondents experienced at least 1 barrier to contraceptive access as an adolescent, and 55% reported that these barriers prevented them from obtaining a prescription for birth control.[27] Furthermore, minoritized individuals, people with disabilities, and LGTBQIA people are disproportionately affected by these barriers.[28,29] Expanding access to these essential medications, such as allowing contraceptives to be obtained without a prescription, can reduce these inequities.

Governmental and legislative policies also affect access to contraception for adolescents. Currently, 27 states and Washington, DC, explicitly allow minors to consent for contraceptive services.[30] Even with these legal protections in place, access to free confidential contraception has been compromised over the last

several years. For example, despite mandates for contraceptive coverage under the Affordable Care Act, studies have found that insurance does not always cover contraceptive options, particularly LARCs.[31,32] Changes to Title X program funding have also had implications on adolescent reproductive health. Title X provides federal funding to reproductive health clinics such as Planned Parenthood that offer essential health care for adolescents because they provide free and confidential services. Funding for these clinics cannot be used for pregnancy termination. In March 2020, new rules were implemented that prohibited abortion referrals, discontinued the requirement to provide comprehensive pregnancy options counseling, allowed clinics to limit contraceptive offerings owing to reasons of conscience, and most significantly required financial and physical separation of abortion services from Title X clinics. As a result of these rule changes, 39% of these clinics opted to stop receiving federal funding, which affected approximately 1 million youth between the ages of 15 to 17 years.[33] These programmatic changes were reversed in 2021 by the Biden administration; however, future changes to the Title X program may create further barriers for adolescents to access essential care.

There have also been issues for adolescents accessing over-the-counter EC. Beginning in 2013, the US Food and Drug Administration (FDA) removed age restrictions for over-the-counter EC (levonorgestrel 1.5 mg).[24] Even with the removal of age restrictions, some pharmacies may still opt to keep EC behind the counter to prevent theft of the item. This practice ultimately makes access more difficult especially if a patient does not feel comfortable or safe asking a pharmacy employee for EC or if the patient needs to purchase the item outside of pharmacy hours. A study conducted in 2017 contacted 997 pharmacies throughout the United States asking to obtain EC for a 17-year-old and found that 8.3% of pharmacies responded there was no way for a 17-year-old to access EC and that 48.4% of pharmacies incorrectly reported that EC was not available without a prescription to consumers of any age.[34] It is critical for pharmacists to be familiar with contraceptive regulations, particularly as they pertain to adolescents, to minimize barriers to access. Furthermore, state-level EC policies prior to 2013 have been shown to affect adolescent pregnancies. States that had restrictive EC policies including age-related restrictions for distribution, allowance for pharmacist refusal to dispense EC, and allowance to exclude EC from health insurance coverage were found to have higher adolescent birth estimates.[35] Pharmacies can ensure access to EC for their patients by consistently having it in stock, keeping it over the counter, and being available for questions if needed. Additionally, if a pharmacist refuses to dispense the product owing to conscientious objection, there should be alternative staff available to dispense the product or the pharmacist should find an alternative way for the patient to obtain it. If patients encounter barriers when purchasing EC at a pharmacy, ordering the product online may be a suitable alternative.

Over-the-Counter Availability of Oral Contraceptives

In July 2023, the FDA announced that the first daily oral contraceptive pill was approved for purchase without a prescription to consumers of all ages.[36] The approved medication, Opill (norgestrel 0.075 mg; Perrigo, Grand Rapids, MI), is a POP and is expected to be available to consumers in 2024. Given the benefits of contraception for people of all ages, and particularly for adolescents, access to over-the-counter POPs is a major step in minimizing barriers to this important medication. Concerns have been raised about adolescents' ability to safely use contraceptives without guidance from a physician. Research has shown that adolescents can accurately read a medication label and when shown an oral contraceptive label, over 90% of adolescent study participants understood that oral contraceptives do not prevent sexually transmitted infections.[37] Furthermore, adolescents and young adults are similarly able to identify potential contraindications to medications,[38] and contraindications for POPs are exceedingly rare in the adolescent population. Some have expressed concern that having more access to contraceptives may increase risk-taking behavior among adolescents; however, this has not been born out in survey data on teen sexual behavior. According to data from the National Survey of Family Growth, there has been no increase in teens initiating sexual intercourse or reporting sexual intercourse since EC became allowable over the counter.[39]

As Opill becomes available, pharmacists must be prepared to answer questions and provide education to patients about its use. Pharmacists are well equipped to assess for contraindications, drug interactions, and other pertinent safety concerns in addition to providing essential education such as the appropriate dose, frequency of administration, and expected side effects. Perhaps an equally important component to this care is ensuring that the pharmacy is a nonjudgmental and safe space to access this medication. Pharmacies should not be viewed as an additional barrier to patients, but rather a trusted health care setting where they have access to essential medications and information.

Summary

Access to safe and affordable contraception is a basic health need for menstruating adolescents. As clinicians, we encourage adolescents to have open communication with their parents; however, for some adolescents this is not possible. Adolescents unable to involve their parents in their decisions around contraception should not be restricted from accessing

it. Contraceptives legally allowed over the counter should be accessible within a pharmacy without asking a pharmacist or employee for help, which creates additional barriers for adolescents. Ideally, medical providers should be talking to their patients about their contraceptive needs and prescribing when indicated, but pharmacists can play an important role by providing nonjudgmental, evidence-based counseling to adolescents if requested.

Article Information

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Disclosure. The authors declare no conflicts or financial interest in any product or service mentioned in the manuscript, including grants, equipment, medications, employment, gifts, and honoraria.

Ethical Approval and Informed Consent. Not applicable.

Received. February 21, 2024

Accepted. March 4, 2024

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